

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR §1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A high-pressure discharge lamp, comprising:
[[-]] with a burner (2) which has including a burner wall (25) and a discharge chamber (24) enclosed by said burner wall (25), wherein a region with a lowest temperature and a region with a highest temperature establish themselves at the contour of the burner wall (25) during operation of the lamp and in dependence on the mounting position of the lamp, and

[[-]] and with a multilayer interference filter (3) which is provided on a portion of the an outer contour of the burner wall (25), which interference filter (3) reflects towards the discharge chamber (24) mainly light in that a wavelength range of the IR infrared light wherein the material of the burner wall (25) has its maximum emissive power and the material of the burner wall is not transparent to the infrared light.

2. (Currently Amended) A The high-pressure discharge lamp as claimed in claim 1, characterized in that wherein a layer (3.1) with a higher refractive index and a layer (3.2) with a lower refractive index occur in alternation in the layer structure of the multilayer interference filter (3).

3. (Currently Amended) A The high-pressure discharge lamp as claimed in claim 2, characterized in that wherein the layer (3.2) of the interference filter (3) having the lower refractive index preferably comprises predominantly SiO₂, and the second layer (3.1) of the interference filter (3) is made of a material having a higher refractive index than SiO₂, preferably predominantly zirconium oxide (ZrO₂).

4. (Currently Amended) A The high-pressure discharge lamp as claimed in claim 1, characterized in that wherein the second layer (3-1) is made of a material chosen from the group of titanium oxide, tantalum oxide, niobium oxide, hafnium oxide, silicon nitride, particularly preferably zirconium oxide ZrO₂, or a mixture of these materials.
5. (Currently Amended) A The high-pressure discharge lamp as claimed in claim 1, characterized in that wherein the interference filter (3) is arranged in that location or at least in that location where the region of lowest temperature establishes itself at the outer contour of the burner wall (25).
6. (Currently Amended) A The high-pressure discharge lamp as claimed in claim 1, characterized in that wherein the interference filter (3) is arranged not in that location where the region of lowest temperature establishes itself at the outer contour of the burner wall (25).
7. (Currently Amended) A The high-pressure discharge lamp as claimed in claim 1, characterized in that wherein the high-pressure gas discharge lamp is a UHP lamp.
8. (Currently Amended) A The high-pressure discharge lamp as claimed in claim 1, characterized in that wherein the material of the burner wall (25) is made in particular of quartz, and accordingly the interference filter (3) is capable of reflecting mainly IR infrared light in the wavelength range from 2 μm to 5 μm.
9. (Previously Presented) A lighting unit comprising at least a lamp as claimed in claim 1.

10. (Previously Presented) A projection system comprising at least a lamp as claimed in claim 1.